

REMARKS / ARGUMENTS

Reconsideration of this application as amended is respectfully requested.

Independent claims 1, 17, 22 & 25 have been amended in response to Examiner's rejection.

Dependent claim 9 has been amended, to take care of Examiner's objection, by correcting the spelling of the word "accommodating".

No new claim has been added and no new subject matter has been added in any claim.

Rejections under 35 U.S.C. 101

The Examiner rejected claims 1-26 & 28 under 35 U.S.C. 101 as being directed to non-statutory subject matter.

As per the Examiner's suggestion, the preambles of independent claims 1, 17 and 22 have been changed from "A method for displaying..." to "A computer executable method for displaying...". Thus, the rejections under 35 U.S.C. 101 regarding claims 1-24 & 28 have been overcome.

The preamble of independent claim 25 has been changed from "A system for displaying..." to "A computer system for displaying...". Thus, the rejections under 35 U.S.C. 101 regarding claims 25 & 26 have been overcome. Paragraphs [0183] to [0186] describe the computer system and computer readable medium for implementing the present invention.

Rejections under 35 U.S.C. 103

The Examiner rejected claims 1-8, 11, 13, 16-25, 27, and 28 under 35 U.S.C. 103(a) as being unpatentable over Wallack, U.S. Patent No. 6,055,550 issued April 2000, in view of Kanevsky, U.S. Patent No. 6,300,947 issued October 2001.

Applicants respectfully disagree for reasons explained hereinafter.

As pointed out in paragraph [0023] the present invention aims to, "automatically format information array displays within predetermined two dimensional display space constraints with optimum allocation and use of the available display space such that maldistribution and wastage of space is minimized and maximum possible readability is preserved."

Paragraph [0072] explains the reasons for maldistribution and wastage of space while displaying two dimensional information arrays. Paragraphs [0074] to [0086] disclose some methods of the present invention for allocating display space such that space wastage is minimized and maximum possible readability of information is preserved.

Applicants' Response will now focus on the independent claims of the present invention.

Rejection of claim 1:

The Examiner's objections to claim 1 are listed along with Applicants' explanation of the differences between amended claim 1 and the references cited.

Objection to preamble of claim 1:

Wallack (Col. 3, l. 11-30, Col. 5, l. 2-11) teaches the features described in the preamble of claim 1.

Applicants' Response:

Wallack teaches determination of optimum width of a column.

On the other hand, claim 1 of the present invention is a method for displaying elements of an information array within a predetermined two dimensional display space, wherein the predetermined two dimensional display space is divided into cells formed at intersections of columns and rows.

Even though Wallack mentions a matrix including rows and columns, the system and method merely describes resizing of one column by determining an optimum column width. The method of claim 1 of the present invention is very different as it involves two dimensional allocation of space to multiple rows and columns to fit information array elements within a predetermined two dimensional display space.

Objection to step (a) of claim 1:

Kanevsky (Col. 6, l. 20-27, Col. 7, l. 25-41) teaches the "determining display space requirement..." feature in step (a) of claim 1.

Applicants' Response:

Kanevsky teaches sending a display mode message including a display size of the display device.

On the other hand, step (a) of claim 1 of the present invention relates to determining the amount of space required to display information elements.

Objection to step (b) of claim 1:

Wallack (Col. 4, l. 48 - Col. 5, l. 11) teaches the "moderating the DSR..." feature in step (b) of claim 1.

Applicants' Response:

Wallack teaches determination of an optimal width for a selected column (e.g., by calculating the average width).

On the other hand, step (b) of claim 1 of the present invention relates to moderating (i.e., reducing) the DSR value of an element based on certain criteria. This is very different from the "calculation of display width" taught by Wallack and there is no

evidence that this step has been disclosed/ performed either by Wallack or by anybody else.

Objection to step (c) of claim 1:

Wallack (Col. 3, l. 35-40, Col. 4, l. 35-39) teaches the "allocating column widths..." feature in step (c) of claim 1.

Applicants' Response:

Wallack merely teaches determination of an optimal width for a selected column. Wallack has merely mentioned that, "...the techniques described herein may be applied to the sizing of height for one or more selected rows and the sizing of both height and width for selected cells.", without actually describing this.

On the other hand, step (c) of claim 1 of the present invention allocates row heights and column widths based on ModDSR and related values. This is quite different from the method described by Wallack and there is no evidence that this step has been disclosed/performed either by Wallack or by anybody else.

Objection to step (d) of claim 1:

Wallack (Col. 4, l. 46-47) teaches the "displaying the elements..." feature in step (d) of claim 1.

Applicants' Response:

Step (d) of claim 1 of the present invention has meaning and purpose if considered, as a whole, along with the rest of claim 1. Thus, displaying step (d) of claim 1 is quite different from what Wallack teaches.

Thus, claim 1 is not obvious over the cited prior art and is, therefore, patentable.

Rejection of claim 17:

The Examiner's objections to claim 17 are listed along with Applicants' explanation of the differences between amended claim 17 and the references cited.

Objection to preamble of claim 17:

Wallack (Col. 3, l. 11-30, Col. 5, l. 2-11) teaches the features described in the preamble of claim 17.

Applicants' Response:

Wallack teaches determination of optimum width of a column.

On the other hand, claim 17 of the present invention is a method for displaying elements of an information array within a predetermined two dimensional display space, wherein the predetermined two dimensional display space is divided into cells formed at intersections of columns and rows.

Even though Wallack mentions a matrix including rows and columns, the system and method merely describes resizing of one column by determining an optimum column width. The method of claim 17 of the present invention is very different as it involves two dimensional allocation of space to multiple rows and columns to fit information array elements within a predetermined two dimensional display space.

Objection to step (a) of claim 17:

Kanevsky (Col. 6, l. 20-27, Col. 7, l. 25-41) teaches the "determining display space requirement..." feature in step (a) of claim 17.

Applicants' Response:

Kanevsky teaches sending a display mode message including a display size of the display device.

On the other hand, step (a) of claim 17 of the present invention relates to determining the amount of space required to display information elements.

Objection to step (b) of claim 17:

Wallack (Col. 3, l. 35-39, Col. 4, l. 15-18) teaches the "determining moderated display space requirement..." feature in step (b) of claim 17.

Applicants' Response:

Wallack merely teaches determination of an optimal width for a selected column. Wallack has merely mentioned that, "...the techniques described herein may be applied to the sizing of height for one or more selected rows and the sizing of both height and width for selected cells.", without actually describing this.

On the other hand, step (b) of claim 17 of the present invention relates to determining moderated (i.e., reduced) display space requirement value of an element. This is very different from what Wallack teaches and there is no evidence that this step has been disclosed/ performed either by Wallack or by anybody else.

Objection to steps (c) & (d) of claim 17:

Wallack (Col. 5, l. 1-2, Col. 3, l. 35-39) teaches the "measuring the lopsidedness..." feature in step (c) of claim 17 and the "depending upon..." feature in step (d) of claim 17.

Applicants' Response:

Wallack merely teaches determination of an optimal width for a selected column. Wallack has merely mentioned that, "...the techniques described herein may be applied to the sizing of height for one or more selected rows and the sizing of both height and width for selected cells.", without actually describing this.

On the other hand, step (c) of claim 17 of the present invention measures the lopsidedness of distribution of larger elements across columns and rows and step (d) of claim 17 allocates column widths or row heights first depending on whether lopsidedness is greater across columns or across rows. Wallack has not even mentioned the concept of "lopsidedness of distribution of larger elements". Thus steps (c) and (d) of claim 17 are quite different from the method described by Wallack and there is no evidence that these steps have been disclosed/ performed either by Wallack or by anybody else.

Objection to step (e) of claim 17:

Wallack (Col. 4, l. 46-47) teaches the "displaying the elements..." feature in step (e) of claim 17.

Applicants' Response:

Step (e) of claim 17 of the present invention has meaning and purpose if considered, as a whole, along with the rest of claim 17. Thus, displaying step (e) of claim 17 is quite different from what Wallack teaches.

Thus, claim 17 is not obvious over the cited prior art and is, therefore, patentable.

Rejection of claim 22:

The Examiner's objections to claim 22 are listed along with Applicants' explanation of the differences between amended claim 22 and the references cited.

Objection to preamble of claim 22:

Wallack (Col. 3, l. 11-30, Col. 5, l. 2-11) teaches the features described in the preamble of claim 22.

Applicants' Response:

Wallack teaches determination of optimum width of a column.

On the other hand, claim 22 of the present invention is a method for displaying elements of an information array within a predetermined two dimensional display space, wherein the predetermined two dimensional display space is divided into cells arranged into columns or rows.

Even though Wallack mentions a matrix including rows and columns, the system and method merely describes resizing of one column by determining an optimum column width. The method of claim 22 of the present invention is very different as it involves two dimensional allocation of space to cells in multiple rows and columns to fit information array elements within a predetermined two dimensional display space.

Objection to step (a) of claim 22:

Kanevsky (Col. 6, l. 20-27, Col. 7, l. 25-41) teaches the "determining display space requirement..." feature in step (a) of claim 22.

Applicants' Response:

Kanevsky teaches sending a display mode message including a display size of the display device.

On the other hand, step (a) of claim 22 of the present invention relates to determining the amount of space required to display information elements.

Objection to steps (b) & (c) of claim 22:

Wallack (Col. 4, l. 48-Col. 5, l. 11, Col. 5, l. 12-41) teaches the "checking whether..." feature in step (b) and the "allocating column widths and row heights..." feature in step (c) of claim 22.

Applicants' Response:

Wallack teaches determination of display width for one column based on the widths of sample records in the column.

On the other hand, step (b) of claim 22 of the present invention relates to checking whether the information array elements can be displayed in matrix format within the predetermined two dimensional display space. This checking step is not even hinted at by Wallack.

Additionally, step (c) of claim 22 of the present invention relates to allocating column widths or row heights to (and between) multiple (not one) columns or rows.

Thus, steps (b) & (c) of claim 22 are very different from what Wallack teaches.

Objection to step (d) of claim 22:

Wallack (Col. 5, l. 1-2, Col. 3, l. 35-39) teaches the "within each column or row, allocating..." feature in step (d) of claim 22.

Applicants' Response:

Wallack merely teaches determination of an optimal width for a selected column. Wallack has merely mentioned that, "...the techniques described herein may be applied to the sizing of height for one or more selected rows and the sizing of both height and width for selected cells.", without actually describing this.

On the other hand, step (d) of claim 22 of the present invention relates to allocating heights or widths of cells in proportion to the DSR values of the elements.

Objection to step (e) of claim 22:

Wallack (Col. 4, l. 46-47) teaches the "displaying the elements..." feature in step (e) of claim 22.

Applicants' Response:

Step (e) of claim 22 of the present invention has meaning and purpose if considered, as a whole, along with the rest of claim 22. Thus, displaying step (e) of claim 22 is quite different from what Wallack teaches.

Thus, claim 22 is not obvious over the cited prior art and is, therefore, patentable.

Rejection of claim 25:

Examiner rejected claim 25 saying, "claim 25 reflects the system used for implementing the method as claimed in claim 1, and is rejected along the same rationale."

As explained hereinbefore, claim 1 is not obvious over the cited prior art and is patentable. Thus, claim 25 also is not obvious over the cited prior art and is, therefore, patentable.

Conclusion

Neither Wallack nor Kanevsky describes the present invention, as claimed in independent claims 1, 17, 22, & 25, as neither deals with allocation of space for displaying a two dimensional information array within a predetermined two dimensional display space.

It is not obvious to combine Wallack and Kanevsky because they are addressing different problems and Kanevsky relates to a different field. The methods described by

Wallack relate to determination of optimum width of a column/field. The methods described by Kanevsky relate to a web page adaptation system where the content may be combined & fitted into the current page or selectively moved to hierarchically linked new pages.

Even if Wallack and Kanevsky were to be combined one would not get the present invention, because the combined invention would lack the space allocation methods for displaying a two dimensional information array within a predetermined two dimensional display space.


From the foregoing, it is clear that none of the cited references when read individually describe Applicants' claimed invention. Second, the combination of methods from said references is not obvious. Third, the suggested combination would still lack important features of the present invention.

Thus, the references cited by the Examiner, either individually or in combination, do not render the invention of Applicants' independent claims, as amended, obvious. The dependent claims are not obvious for the same reasons applicable to the independent claims. Accordingly, this rejection is overcome.

In view of the above, it is submitted that all of the claims are in condition for allowance, timely notice of which is respectfully requested.

No new claims are presented and there is no change in the number of independent and dependent claims and hence no additional fees are necessary by virtue of this amendment.

Respectfully submitted,



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